Description of a New Species of *Hexatoma* (*Hexatoma*) from California (Tipulidae, Diptera)

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Recently I received, and later found and reared, specimens of a crane-fly which is recognized as a new species of the subgenus *Hexatoma*, genus *Hexatoma*. The subgenus *Hexatoma* has two species recorded from the North American continent, none from the western United States. All other species of the genus within the United States are of the subgenus *Eriocera*. The types are preserved in the collection at California Polytechnic State University at San Luis Obispo, CA.

Hexatoma (Hexatoma) hartmani, New Species

Male. – Length 6.1–7 mm; wing 6.3–6.9 mm; antenna 0.71–1.7 mm. Female. – Length 7.4 mm; wing 7.7 mm; antenna 1.5 mm.

Rostrum dark gray, short, palpi black. Antennae black, short, 7 segments; the scape twice the length of the pedicel. The first flagellar segment twice the length of the scape and pedicel combined. The last flagellar segment small, about onefourth the length of the penultimate segment. Head with the anterior vertex black. Mesonotal praescutum with two yellowish stripes on either side of a dark brown median line. Halteres at bases dark gray, remainder of stem and knob yellow. Legs with the coxae, trochanter and femur black, the remainder of the leg gray. Wing (Fig. 1) with ground color light yellow, radial and medial veins bordered by darker coloration. Darkened areas also at base of cells R, M, origin of Rs, and in the Cell IA toward the margin of the wing; dark brown bordering the vein Cu. Venation with Sc_1 ending beyond the fork of Rs, Sc_2 at fork of Rs, Sc_1 alone equal to the length of r-m. R_2 about its own length before the fork of R_{3+4} ; Rs angulated at origin; m-cu just beyond the fork of M. Vein M_{1+2} present and reaching the wing margin; other veins of M absent. Cell 1st M₂ preserved. Abdominal segments uniformly dark gray, with white setae at edges of terga. Hypopygium dark gray except on distal portion of the basistyle, which is yellow. Outer dististyle slender, gently curved medially. Inner dististyle relatively large, fleshy, and cylindrical with abundant erect setae. Aedeagus elongated, reaching back to about the level of the dististyles, curved downward and inward at posterior third of its length. Ovipositor of allotype is fleshy.

Holotype. – (male) Atascadero, CA, Atascadero Creek, March 19, 1984 (Hynes). Allotype. – With the same data as given above for the holotype.

Paratypes.—Three males and 3 females, with same data as given for holotype; one male (Tracey Estes) slide 1590 (wing and genitalia), April 2, 1983 Atascadero, CA. All specimens, with the exception of the one collected by Miss Estes, were reared from larvae and pupae.

I am pleased to name this fly after Dr. Margaret Hartman, whose work with

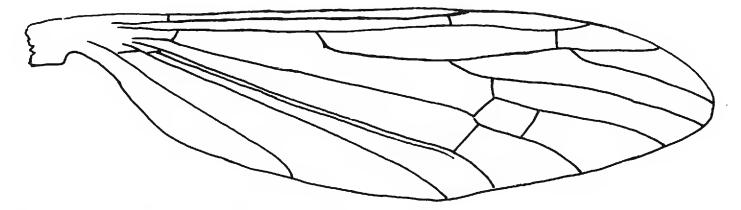


Figure 1. Wing of Hexatoma (Hexatoma) hartmani, new species.

the Rangeland Crane-fly, *Tipula simplex*, has been of great value to the knowledge of crane-fly biology.

Hexatoma hartmani is very much like Hexatoma microcera Alexander, but readily told from this species by the coloration and the larger terminal segment of the antennae. The retention of the Cell 1st M_2 by the adult is not reflected by differences in the larval stages. Consequently, the erection of a new subgenus on this basis is not warranted. The preservation of the Cell 1st M_2 is much as in Hexatoma (Hexatoma) schmidiana of Kashmir, Pakistan (Alexander, 1957a). However, by its description, Hexatoma schmidiana has longer antennae and the coloration very different. Another species with the Cell M_2 preserved was described by Alexander in 1957 as Hexatoma coheri (Alexander, 1957b), placing it in the subgenus Eriocera. He later explained that he did so on the basis of the elongate antennae in the male (Alexander, 1958). Since the preservation of Cell M_2 is accompanied by short antennae and the presence of a fleshy ovipositor in the female, I am placing Hexatoma hartmani in the subgenus Hexatoma.

Numerous larvae and pupae were found in the sandy areas between mounds of *Carex senta* which abounds along the edges of the stream.

LITERATURE CITED

- Alexander, C. P. 1957a. New or little-known Tipulidae (Diptera) CII. Oriental-Australasian species. Ann. Mag. Nat. Hist., (12)10:97–115.
 - -. 1957b. Undescribed species of crane-flies from the Himalaya Mountains (Tipulidae, Diptera).
 - I. Jour. N.Y. Ent. Soc., 64:137-147.
 - —. 1958. New or little-known Tipulidae from eastern Asia (Diptera), XLV. Phil. Journ. Sci., 86:405–409; 4 plts.